L1 CALTrig Upgrade Panel Machining and Channel Assembly May 15, 2005

There are 3- primary machined parts that need to be fabricated to be used for the assembly. As stated below they are the Panel cover, the Front Panel; and the Back Channel. All panels are aluminum 6061-T6 1/8" thick. All pieces are required not to exhibit any stress fractures due to forming stresses. All pieces will need to be irridited and then painted black on the front surfaces. The front panel will require silk-screening with white lettering. The Panel and Channel Assembly drawing (MD-434198) illustrates that the Panel Covers screw into the front panel and the Front Panel screws into the Back Channel. In order to insure conductive mating, the areas on the Front Panel, Panel Cover and Back Channel must be free of paint, so these two areas must be masked before painting.

Machined Parts

D0_RELAY_RACK_PANEL_COVER MB-434212 Material 6061-T6 (12)	Qty Required 88
D0_RELAY_RACK_FRONT_PNL MD-434199 Material 6061-T6 (1)	Qty Required 44
D0_RELAY_RACK_BACK_CHANNEL MD-434200 Material 6061-T6 (2)	Qty Required 55

SUB-ASSEMBLY

The assembly drawing D0_RELAY_RACK_TRIG_PANEL_ASSY MD434198 details assembly steps that require assembling thumb screws and hinge alignment.

- 1. D0_Relay_Rack_Panel_Cover MB-434212 (Item 12) part has to have 4- 6-32 captive screw installed. See Item 7 of the assembly drawing.
- 2. D0_RELAY_RACK_FRONT_PNL MD-434199 (Item 1) part has 2- 10-32 captive screws installed. See Item 6 of the assembly drawing.
- 3. The continuous hinge (Item 3) as called out will need to be cut to size and align with the holes on the Back Channel and the Front panel. No assembly is required relating to mounting the hinge to its panels. Vendor has the option to choose a comparable hinge as needed. Please use a finished hinge such as McMaster-Carr #1569A545.

Request For Quotation:

Please quote assembly of captive screw and hinge as separate line items. You will purchase captive screw and hinge material, please include these costs in your quote. Any questions please give me a call. Johnny Green, Fabrications Coordinator Fermilab PO Box 500 Kirk and Wilson Roads Batavia IL. 60510 ms 357 ph 630 840-3392 fx 630 840-8886